DOCUMENT RESUME

ED 198 978 RC 012 536

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TITLE Project to Design an Evaluation of Outward Bound. Final Report. Educational Reports.
INSTITUTION Colorado Univ., Boulder. Bureau of Educational Field Services.
PUB DATE 73
NOTE 63p.; For related documents, see RC 012 537 and RC 012 556.

EDRS PRICE MF01/PC03 Plus Postage.
DESCRIPTORS Adolescents; Adventure Education; *Affective Behavior; *Content Analysis; Evaluation Criteria; *Evaluation Methods; Feasibility Studies; Observation; Outdoor Education; Program Evaluation; *Self Actualization; Self Concept; Time Factors (Learning); *Urban Youth
IDENTIFIERS *Colorado Outward Bound School; *Wilderness Education Programs

ABSTRACT

After consideration of program constraints and variability factors involved in designing a study to document the effects of Colorado Outward Bound, it was concluded that there should be three separate studies: (1) Study One, a small, tightly-controlled experiment, would have as its subjects inner-city youth from the Denver schools; (2) Study Two would be an investigation of the effects of Outward Bound on all its summer participants (excluding teachers); and (3) Study Three would be a descriptive evaluation consisting of participant observation and a narrative account of what happens to one individual who experiences Outward Bound. Taken together, these studies would fulfill the objectives of the evaluation. The variables of self-esteem, self-awareness, self-assertion, and acceptance of others were chosen as outcome criteria because of their importance in the philosophy of the Outward Bound program. Based on operational definitions of these variables, a 66-item assessment device was developed and pilot tested with two groups. The major evidence for test validity was found in the power of the test to distinguish reliably between the Outward Bound and the high school samples. It was decided that the evaluation should be supervised by a person outside the program, preferably an evaluation agency or institution. Appendixes include a feasibility study, an analysis of variables, and inventories used in evaluation. (CM)

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ED198978

educational reports

FINAL REPORT:
PROJECT TO DESIGN AN
EVALUATION OF OUTWARD BOUND

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Bureau of Educational Field Services
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SCHOOL OF EDUCATION
UNIVERSITY OF COLORADO
BOULDER, COLORADO

RC 01 2536

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Preface

The authors wish to acknowledge the high quality contributions to this project of Drs. Kenneth D. Hopkins and Gene V Glass. The fellows of the University of Colorado Laboratory of Educational Research also provided competent assistance.

Thanks are due to Dr. Robert Godfrey who acted as liaison between the Outward Bound Program and the evaluation staff.

Although these and other people provided assistance, the staff of the Bureau of Educational Field Services, University of Colorado bears full responsibility for the contents of this report.

In addition, the authors wish to re-emphasize that the comments herein refer only to the Colorado Outward Bound School and not to the other Outward Bound schools inside or outside the United States.

I. Background.

There are a variety of techniques available for evaluating educational programs. This variety is a reflection of the different roles which evaluation can serve rather than a matter of "right or wrong" ways of conceptualizing or conducting evaluation studies. One can conceive a continuum of purposes and methods of evaluation ranging from relatively soft, descriptive, subjective studies to ones which employ well-controlled experimental designs on the other hand. Although the roles to be played by evaluation differ (and consequently the methods used), the goal of all evaluation studies is to establish the merit or effectiveness of programs through the use of empirical methods.

Outward Bound is a collection of programs which has generated many evaluation studies. There appears to be a concern to demonstrate empirically what the staff and alumni have subjectively experienced and observed in others; i.e., profound changes in personality, attitudinal and interpersonal characteristics on the part of participants. These evaluation studies include several in which excellent descriptive methods have been used such as interviews and questionnaires from participants, their parents, schools (e.g. Schultz, 1970; Schultz, 1971; and Ratliff, 1972). The technique of participant observation has been effectively used in an attempt to document the experience and its results (Katz, 1969). Studies also have been conducted using more controlled designs with statistical results.

To date, however, no evaluation study of Outward Bound (related to the Colorado School) has been conducted to demonstrate unequivocally the results of Outward Bound.

To design such a study, determine the feasibility of conducting the study and present the necessary instrumentation was the charge given by the director of Colorado Outward Bound to the evaluation staff of the University of Colorado Bureau of Educational Research (See Appendix A).

A survey of the extant studies provided to the evaluation team by Colorado Outward Bound showed that the criterion of unequivocal demonstration of the effects of the program was not attained in any of these studies. The variables which were chosen for study were many and diverse,[1] the most-often chosen variables being those dealing with the self-system. The means of assessment ranged from project-constructed questionnaires to published, multi-factor inventories. The most often-used design was the pre-test/treatment/post-test design (e.g. Clifford and Clifford, 1967). Some of the studies compared results across groups (Freeman et al, 1968 and Adams City, 1967). One of these employed a control group (Kelly and Baer, 1968). The most common source of invalidity in these studies was inferential instability in which random differences were interpreted as statistically significant program effects.

The following findings were inferentially stable. Kelly and Baer (1968) found that the participants changed two semantic concepts--

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[1] These variables included, but were not limited to social maladjustment, value orientation, immaturity, autism, alienation, manifest aggression, withdrawal, social anxiety, repression, denial, asocialization (Kelly and Baer, 1968), recidivism (Kelly and Baer, 1968 and Freeman et al., 1968), values and meanings (Buck, undated), alienation, achievement motivation, attitudes toward school, expected consequences of aggression (Freeman et al., 1968) and personality traits (Adams City, 1967).

"I am" and "Boys who don't get into trouble" following Outward Bound. Clifford and Clifford (1967) reported changes on a self-rating scale for participants with initially poor self-concepts and improved counselor ratings for all participants. Freeman, et al. (1968) found that, following Outward Bound, delinquents made changes in achievement motivation, manifest aggression, and denial. Non-delinquent participants changed in value orientation and the expected consequences of different types of aggression. These findings should be interpreted in light of various threats to validity inherent in the type of design used (Campbell and Stanley, 1966).

That these studies did not meet the criterion of unequivocal results is not an indictment of the studies reviewed, since many different roles may be played by evaluation studies. Rather, they lay a premise for the need for more controlled experimentation if the intent of Outward Bound is to demonstrate conclusively the effects of the program.

In addition to the foregoing review of available studies of Outward Bound, the evaluation staff conducted other activities in an attempt to conceptualize the variables of importance in Outward Bound. Interviews were conducted with central office, field, and instructional staff members and some alumni in order to ascertain what happens to a person who experiences the program. In addition, information was sought concerning what program factors lead to variability in program effects. Besides interviews, a content analysis of Outward Bound materials (e.g. Management by Objectives Seminar,

recruitment materials) was conducted to define the important variables. A conceptual analysis of Outward Bound variables was the result of these activities. Comments on the latter analysis were requested from the staff and incorporated into a revision of that analysis (See Appendix B). In addition to the conceptual analysis a member of the evaluation team conducted field observations of the initial progress of patrols in the July Gore course. The purpose of this observation was to test the utility and feasibility of systematic data collection procedures in the field.

Attempts were also made through staff interviews to answer questions of feasibility such as the tolerance of the program for evaluative intervention, the level of cooperation and commitment for evaluation by the staff, the role the evaluators should play, and the extent of desired participation of the evaluators in the program.

All the above sources of information served as input to the following sections on design, instrumentation, and feasibility.

II. Design.

The purpose of this phase of the project was to design a study which would document the effects of Outward Bound, particularly with respect to inner-city youth. According to the charge to the project this design should fulfill the requirements of good empirical investigations and be respectable within the professional research community. In the interim report a further proposal was made to

augment the investigation with a descriptive evaluation which might more completely capture the complexities of the Outward Bound experience.

After considering constraints in the program as well as the factors which contribute to program variability, it was concluded that three separate studies be proposed. These would be complementary in the sense that their results taken together would fulfill the objectives of the evaluation.

Study One is a small, tightly-controlled experiment, subjects of which would be inner-city youth from the Denver schools. Half of these, selected randomly, would receive scholarships to Outward Bound while the other half would be paid a small sum to provide control data. Both short term outcomes as measured by the instruments developed, and long term behavioral indicators would serve as the dependent variables of the study.

Study Two is an investigation of the effects of Outward Bound on all its summer participants (excluding teachers). The paradigm to be used is the time series analysis in which relevant constructs are assessed at several predetermined points in time before and after the subjects take part in Outward Bound.

Study Three is a descriptive evaluation which consists of participant observation and narrative account of what happens to one individual who experiences Outward Bound.

Culminating activities will consist of a synthesis of the three studies, incorporating previous evaluation results, evaluator

observations and judgments, and resulting recommendations. Detailed descriptions of these three studies are given below.

Study One. Part of the original charge to the investigators was to focus on the effects of Outward Bound on inner city youth. A small tightly-controlled experimental design is proposed to study only this population. The basic purpose of Study One is to determine whether the group of inner city youth which has experienced Outward Bound demonstrates the desired qualities[2] to a greater extent than the equivalent group not having this experience. In addition the group characteristics of cohesiveness, cooperation, trust and mutuality will be observed and charted in those patrols which include the "experimental" participants.

Outward Bound staff will describe the population of participants of most interest to itself or funding agents. The criteria on which the population is defined should include age, grade in school, economic factors, such as parents' income, potential interest in Outward Bound, race, etc. The population should consist of no less than 80 people, half of whom are male and half female. All of these people should have at least one more year of high school remaining after the Outward Bound course. Outward Bound should work with cooperating Denver high schools to identify this group. It is suggested that court

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[2] These are variables measured by the developed instruments (described below) as well as behavioral indicators observed over a period of one year.

referrals be excluded from the population due to lack of control over selection, orientation, and level of motivation of this group.

The evaluation staff then will randomly select and assign 15 males and 15 females to the experimental group and the same numbers to the control group. Outward Bound will provide scholarships for the experimental group. The control group will be contacted and asked to participate. The remaining people will provide a replacement pool in case any of the scholarships are refused.

Outward Bound should insure cooperation for the collection of data from these groups within the high school. The evaluation staff will collect this data after Outward Bound acquires this cooperation.

The experimental group should be assigned to 6-8 patrols so that the subjects will not compose the majority on any one patrol.

This study should take place under the best combination of circumstances with the best instructors. It was the feeling of most of the Outward Bound staff that a great deal of variability exists among instructors, courses, and times of year. This variability contributes to differences in the quality of the Outward Bound experience. To test the effects of this variability would require an extremely complex factorial experiment and a large sample. These circumstances in turn would necessitate a great deal of interference by the evaluators into the program structure.

Instead, it is proposed that the most effective and powerful combination of circumstances be chosen by the staff so that Outward Bound be shown to best advantage. Although this procedure limits the external validity of the study (the result may not be generalizable to every course or every instructor) the internal control over the experiment is increased and procedures are simplified. The senior staff of Outward Bound should select the course, the month (June or July would be preferable from the standpoint of the evaluation) and the instructors, and should assign the experimental group participants to these patrols.

Observer-raters[3] who have worked with Outward Bound but who are trained and supervised by the evaluation staff should accompany these patrols. They will be provided with observation rating instruments to document group development on the patrol at four times during the course. An example of the rating instruments is provided in Appendix E.

On the final day of the Outward Bound course, the observer-raters will supervise the administration to the experimental group of the instruments developed in this project. On approximately the same day the evaluation staff will administer the instruments to the individuals in the control group. A five dollar incentive will be provided for each member of the latter group.

Follow-up data on both experimental and control groups will be collected at the end of the first and the second semesters subsequent

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[3] The M.Ed. students would be the persons best-suited to perform this function.

to the Outward Bound course. The variables will include grade point average, extra-curricular activities participated in, leadership positions held, discipline or delinquency problems, and adjustment as rated by teachers, parents, or peers. The two groups will be compared on these variables using appropriate statistical procedures. Outward Bound should insure cooperation from the high schools in the matter of follow-up data collection.

The proposed study is a true experiment (Design Six in Campbell and Stanley, 1966). Randomization eliminates the need for a pre-test by distributing pre-treatment differences between the experimental and control groups. Sex differences and treatment effects on the outcome variables will be simultaneously assessed by using a two-factor analysis of variance. Using pre-Outward Bound variables such as grade point average or rated adjustment as covariates would increase the power of the study to detect real differences between those who have experienced Outward Bound and those who have not.

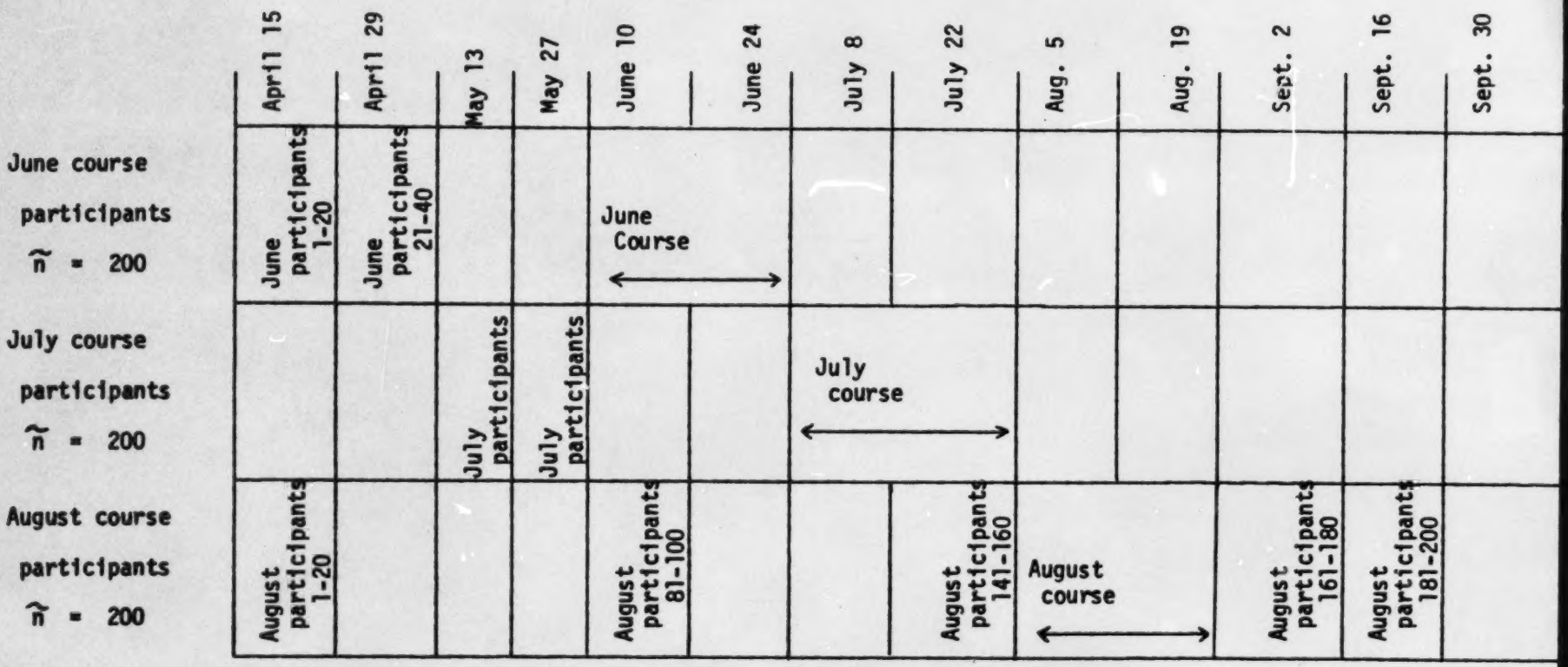
Study Two. While Study One is designed to examine the effect of a limited segment of Outward Bound, Study Two tests the generality of effects across courses, times and instructors by using a time series design.

The time series design (Campbell and Stanley, 1966, p. 37 ff.) is particularly useful in situations which do not permit extensive interference by the evaluation into the operation of a program. Such intervention is the necessary concomitant of the random assignment

of participants to groups. This randomization is necessary to infer that the "treatment" (Outward Bound) causes the "outcome" (greater self-awareness, self-esteem, self-assertion, and acceptance of others). In cases such as the present one, in which randomization of all subjects to courses and patrols is not feasible, the time series design strengthens the causal claim and removes the threats to a study's validity which arise in a pre-test treatment post-test design. The time series involves repeated observations both prior to and following treatment. The attribution of treatment effects to the natural progression of events can be more reliably discounted when, over repeated measurement of the relevant variables, an abrupt shift occurs following introduction of the treatment. The time series analysis is useful in monitoring duration and fluctuation of observed differences in the criterion measures.

For the proposed study all the summer participants who have already been assigned to the June, July, and August courses would be randomly assigned by the evaluation staff into one of ten subsamples for the purpose of testing. Beginning approximately April 15, the first subsample would be sent the instruments. On April 30, the second subsample would be sent the instruments. This sequence would continue at two week intervals, interrupted only by the course itself, until the last week in September. Using this procedure, each participant will complete the instrument only once. This design is illustrated on page 11.

DESIGN OF STUDY TWO



Study Two is a unit replicative stratified multiple group-single intervention time series design.

Of the approximately 200 participants in each of the three summer courses, 10 groups of equal size ($n \sim 20$) will be formed by random assignment. This assignment will determine the period of time in which each individual will be sent an instrument to complete.

This chart is based on the 1973 schedule of courses and should be altered to conform to the 1974 schedule.

The collection of data at four (June group), six (July group), and eight (August group) points prior to each groups Outward Bound experience should provide the necessary baseline data against which to rest the effect of the Outward Bound experience on the relevant variables.

This design effectively controls several sources of invalidity in an experiment (see Campbell and Stanley, 1966 and Glass, Willson, Gottman, 1972). First, the possibility that pre-testing may account for outcomes (i.e., testing effect) is eliminated since each individual participant responds to the instrument only once. Some participants will respond before they experience Outward Bound; some will respond afterwards. The group which is assessed before and the group which is assessed afterwards will be randomly equivalent.[4] Second, since the "treatment" is staggered, there is less possibility that any changes in the outcome variables will be caused by some historical accident. Third, the extent of statistical error or random fluctuation will be tested by appropriate statistical analysis. Fourth, because three groups will be analyzed, results will indicate whether the effects of Outward Bound are generalizable across groups of participants.

The rationale for this design is sound. Its implementation will be reasonably painless for the Outward Bound organization, since no

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[4] It should be reemphasized that this study does not require random assignment of participants to courses or to patrols. Rather, the participants will be assigned to subsamples only for the purpose of determining when they will complete the instruments. No intervention into the program structure is necessary.

intervention is necessary. Several ground rules must be followed. First, the names, addresses, and course assignments of all summer participants must be provided to the evaluators by April 1, 1974. Second and most crucial, all participants must sign a statement in which he promises to participate in the evaluation and to complete the instruments sent to him within twenty four hours. An example of the form of this contract is given in Appendix C.

Study Three. Descriptive evaluation will be provided by using the technique of participant observation. A participant observer will be hired on the basis of four criteria: 1) he or she will not have experienced Outward Bound before, 2) he will not be atypical of Outward Bound participants in the sense of having advanced mountaineering skills, 3) he will have training in behavioral or social sciences (knowledge of feelings and personal interactions), and 4) he will have demonstrated ability to write with sensitivity and meaning.

The participant observer will be placed in a selected course and patrol and will participate with no special priviledges or designation as an observer. He will interview other patrol members only as he feels necessary. Some guidelines for observation may be provided. The report he writes will be a collection of descriptions, impressions and feelings about what happened between himself and Outward Bound, between himself and other participants, and to himself as a result of the experience.

In the interim report prepared by the writers, mention was made of other techniques to gather descriptive information. In regard to these techniques, it should be pointed out that there is serious doubt about whether journal entries constitute valid data. The inconsistent introduction given by the instructors concerning the journals, and the non-representative group which actually completes the journals render them suspect as an evaluation data source. Other descriptive techniques have been used repeatedly in previous Outward Bound evaluations and proposing them again in the present study seems redundant.

Culminating Activities. Since evaluations ought to contain both descriptions of the program and judgments concerning its merit (Stake, 1967), several culminating activities are suggested. Findings from Studies One, Two, and Three along with supplementary data ought to be brought together and studied in order that conclusions, interpretations, and judgments of program merit be made. The supplementary data might include the illness and accident report, the drop-out summaries and the instructors and course directors' evaluations.

Several people might be called upon to study the resulting evaluation report and judge its merit: an Outward Bound alumnus, a member of the staff, the director, as well as outside evaluation consultants. The resulting document will be the final report of the evaluation project.

III. Instrument Development.

There are opposing reasons between choice of a published instrument and one which locally is especially constructed for a particular purpose. Some but not all published instruments have been standardized on some norm group and have established reliabilities. Also validation data is available for a few affective measures. However, the more basic criterion for test selection, content validity, is hardly ever met by published instruments in the affective domain. Unless the instrument measures variables which are important to the particular program (contained in its goal statements) its standardization data is useless in evaluating that program. Even when the name of a test or subtest seems congruent with program goals, content validity is not insured. Thorough content analysis at the item level may well reveal, for example, that the construct of "self concept" is defined differently by the test than through the program. Furthermore, the norm group on which the test is standardized may be dissimilar to the population in the program. Apart from these concerns, the test may be too long, cumbersome to administer, or troublesome to score and interpret, three characteristics which limit the utility of the test.

These problems plague instrument selection for the evaluation of Outward Bound. Substantive differences were found between the program definitions of the constructs self-awareness, self-assertion and acceptance of others and the definitions of these variables in

the best quality published instruments. There also is good reason to suspect that Outward Bound participants have different characteristics than the usual norming population, a possibility which limits the standardization data. The best solution to this problem is to construct instruments which are content valid, yet meet standards of technical adequacy: reliability, validity, and utility.

Based on this decision, four principal variables were chosen as outcome criteria. These variables were chosen on the basis of interviews with staff, and analysis of program documentation, previous evaluation studies, and materials from the seminar on management by objectives conducted by Harmon. Their operational definitions are as follows:

Self-Esteem. A person high on this scale will endorse statements which indicate his valuing of himself as a person of worth, his perception of himself as neither vastly superior or inferior to other people, his acceptance of himself regardless of weaknesses, his acceptance of his physical body, his mental abilities, his ability to relate to others, and his own standards. He will reject self-deprecating comments, as well as fears of judgment of him by other people.

Self-Awareness. A person scoring high on this scale will show evidence of self-examination and analysis by indicating that he has engaged in these processes and feels in touch with himself and aware of his emotions, abilities, potential and limitations.

Self-Assertion. A person scoring high on this scale will endorse statements which show activity rather than passivity, which indicates taking rather than avoiding leadership and responsibility, which indicate confronting rather than avoiding fear-provoking or challenging situations.

Acceptance of Others. The person who endorses statements of compassion for other people will score high on this scale. Acceptance of others regardless of their weaknesses, willingness to assist the less able person, taking responsibility for others when it is necessary, are all components of this construct. "Others" here definitely should mean persons both in and outside the patrol. The necessity for items to exclude patrol-oriented wording, leads to an ambiguity in the scale. However, this ambiguity is pervasive through the program itself.

Based on the above operational definitions, a 66-item assessment device was developed, with a combination of new items and items from available instruments. The writers used principles and techniques of attitude assessment documented in Scott (1968), Shaw and Wright (1967) and Shepard (1972). Several steps were taken to refine this instrument. First, the items were submitted to expert judges consisting of graduate students and faculty members in educational research, counseling, and psychology. They were requested to match each item with the construct it was supposed to measure, to judge the extent of coverage of the construct by the items and to comment on the social desirability of the items. As a result of this matching process, items which could not be reliably placed in their nominal

subtests were deleted from the instrument or substantially altered and re-tested. In this way, the content and construct validity of the instruments were assessed.

Second, the instrument was pilot tested with two groups. The members of the July course at the Gore Range (n=62) completed the instrument. The pilot testing proceeded smoothly. The administrator reported that the participants appeared to take the instrument seriously, were thoughtful and cooperative. No obvious problems were encountered. Participants took an average of fifteen minutes to complete the instrument; no one required over twenty minutes. Helpful comments and suggestions were provided by some of the instructors. The second pilot administration was conducted with high school sophomores. The purpose of this activity was to determine the reading level of the items and to provide more stable information on the item, subscale, and instrument reliabilities.

Through the process of item analysis, a subset of items was selected based on item-subtest correlations, conceptual fit between the items and the operational definitions of each item. Forty-seven items satisfied these criteria. Below are the scale data for the final version of the instrument, entitled Inventory of Outward Bound Effect.

Scale	Number of Items	Mean	Standard Deviation	Reliability
Self-Esteem	16	51.82	8.35	.77
Self-Awareness	6	21.48	2.97	.44
Self-Assertion	16	56.60	7.16	.78
Acceptance of Others	9	29.99	4.98	.59
Composite Score	47	159.89	17.66	.86

Both the indicated reliabilities and variances are sufficient for the purpose at hand; i.e. the detection of mean differences among groups which have and have not experienced Outward Bound.

Evidence for instrument validity is three-fold. Construct and content validity were determined by the matching, by expert judges using operational definitions, of items with their nominal subtests, as well as the coverage of constructs by items. Second, an attempt was made to correlate subtest scores of the Outward Bound sample to instructor ratings. A significant positive correlation was found between the self-assertion scale and a set of items from the instructor rating scale which appeared to fit that construct. However, no relationships were found between the self-awareness and acceptance of others scales with similar items on the instructors rating scales.

The major evidence for test validity was found in the power of the test to distinguish reliably between the Outward Bound and the non-Outward Bound (i.e. high school) samples. A significant result from an analysis of variance demonstrated that the mean composite score on the Inventory of Outward Bound Effects for persons who had completed Outward Bound was significantly higher (alpha=.05) on the constructs self-esteem, self-awareness, self-assertion, and acceptance of others than the mean for the non-participant group. Although this significant difference between groups is not necessarily a measure of program effectiveness (since many variables were not controlled), this difference reflects on the value of the test to demonstrate the effects of the program in a well-designed study. In the absence of such evidence, the researcher, finding no difference between groups could come to two conclusions: either the program had no effects or the tests were insensitive to the effects which

did exist. In the presence of such prior evidence the latter conclusion could less readily be made.

From the foregoing accumulation of evidence, confidence may be placed in the Inventory to accomplish the intended purpose of evaluation of Outward Bound.

The process instrument (Appendix E) to be used as a tool of observation to assess group development has not been pre-tested. It should be refined as part of the initial stages of the evaluation study. The observer-raters should be trained in its use. The variables to be measured with the process instrument are cooperation, mutuality, and group cohesiveness. These variables were selected from published literature on group development as well as material from The Management by Objectives seminar. The experience of the field observer was particularly helpful in constructing this instrument.

IV. Feasibility.

Feasibility encompasses three interlocking components: administrative, economic, and psychological. Taken together these components provide an indication of whether the benefits to the program of the evaluation will exceed the costs.

Administrative feasibility refers to the source and allocation of resources over time. If the designs proposed in this paper are to be implemented, an early decision must be reached by Outward Bound and funds must be found. Thereafter several checkpoints between the program and the evaluators are necessary. Since each step in the studies is completely dependent on the achievement of previous steps, the evaluation cannot proceed without these checkpoints. A time schedule has been provided below which gives an example of the checkpoints as well as the distribution of activities over time.

Agreement on these activities must be reached as a condition of the evaluation contract.

Approximate Time Schedule for Outward Bound Evaluation

Ending Date	Activity
March 1, 1974	1. Evaluation contract settled. Financial support arranged by Outward Bound.
March 15	2. Arrangements (by Outward Bound) made with high schools for the recruitment of Study One subjects. Arrangements also made for collection of data on same.
	3. Contracts (see Appendix C) sent to all summer participants for Study Two.
	4. Population for Study Two defined by Outward Bound.
	5. Evaluation staff, participant observer, and observer-raters selected.
April 1	6. Formation of recruitment pool of Study One Participants by Outward Bound.
	7. Evaluators assign Study One participants to experimental, control or replacement groups.
	8. Study Two contracts checked in by Outward Bound.

Ending Date	Activity
April 1	9. Outward Bound provides names, addresses, and course assignments for Study Two participants.
	10. Evaluators prepare instrument for Studies One and Two.
April 15	11. Outward Bound awards scholarships to Study One experimental subjects (N.B. Outward Bound informs evaluators of any attrition from the samples)
	12. Background data collected by evaluators on Study One subjects.
	13. At two week intervals through September 30: instruments sent out to Study Two subjects, return of instruments monitored, follow-ups sent to non-respondents, data from instruments coded and punched.
May 1	14. Program conditions and instructors selected for Study One by Outward Bound.
	15. Observer-raters selected.
May 15	16. Observer-raters trained by evaluators.
June 1	17. Study One takes place

(may be July rather than June course)

Ending Date	Activity
June 1	18. Study Three (participant observation) takes place.
	19. Control subjects in Study One contacted by evaluator.
Last day of course	
	20. Observer-raters collect data from Study One experimental subjects.
	21. Data collected from control subjects.
July 1	22. Data from Study One coded and keypunched.
July 15	23. Study One data analyzed.
August 1	24. Report on Study One completed.
	25. Report on Study Three completed.
	26. Times Series analyst consulted.
September 30	27. Study Two completed.
October 31	28. Data from Study Two analyzed.
November 30	29. Report on Study Two completed.
January 31, 1975	30. Follow-up data on Study One collected.
June 15	31. Follow-up data on Study One collected.
June 30	32. Follow-up data coded, punched, analyzed.
	33. Supplemental data provided by Outward Bound to evaluators for culminating activities.
July 31, 1975	34. Final report completed.

The administrative arrangements of the evaluators should also be noted. Since the activities extend over one and a half years and would not occupy one person over that amount of time, preference should be given to an evaluation agency or institution rather than one or two individuals. This arrangement should be less expensive and should assure continuity.

The evaluation should be supervised by a person outside Outward Bound. The question of an internal vs. external evaluator is widely debated. Certain Outward Bound staff members as well as evaluation experts argue that a person cannot know the program unless he has experienced it. The advantages of direct knowledge of the program, however, are heavily outweighed by the accompanying potential loss of objectivity and evaluative credibility.[5] The purpose of the proposed evaluation is not to duplicate past internal, formative evaluations. Rather, the purpose is for a summative evaluation which will document the effects of Outward Bound according to the standards of the research community. This purpose dictates the recommendation of external evaluation, the case for which has been made by some of the leading thinkers in the field.[6]

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[5] Evidence for this point is available through a critical reading of previous evaluation studies. The primary threat to these studies was inferential instability--interpreting random differences as if they were treatment effects--which seems traceable to the orientation and role of the evaluator.

[6] e.g., Scriven, 1967. Evaluators, "besides importing their own prejudices, are handicapped so long as they are less than fully familiar with the subject matter being restructured, and less than fully sympathetic with the aims of the creative group. Yet once they become (footnote continued on p. 25)

Economic feasibility refers to the costs of the proposed evaluation and the availability of funds to contract for it. The budget of an evaluation of this type is large by necessity and may obviate both the need and the desire for such a study. The budgetary figures presented below are only approximations based on the estimated cost of each task. The variability of budgetary and overhead structures among evaluation contractors should not be underestimated For certain contractors, such items as rental of office space will be included as a line item in the budget. For others, this will be covered in overhead. Therefore, the estimates have little reality out of context of any one agency.

Estimated Budget for
Outward Bound Evaluation

Contracted Expenses

Professional Evaluator - 160 hours ≅ 1 month	$1,200.00
Research Assistant - 7 months @ 9/14 time @$7200/9 months	3,600.00
Clerk-Typist - 60 hours @$5.00/hour	481.00
Observer-Raters - 4 @$300	1,200.00
Consultant - 1 day @$100/day	100.00
Participant-Observer - 4 weeks @$250/week	1,000.00
Payment of control group subjects 30 @$5.00	150.00
Total Wages	$8,031.00

(Footnote 6 continued)
identified with those aims, emotionally as well as economically, they lose something of great importance to an objective evaluation - their independence. For this reason the formative evaluators should, if at all possible, be sharply distinguished from the summative evaluators, with whom they may certainly work in developing an acceptable summative evaluation design. If this distinction between formative and summative evaluation personnel is made, it becomes possible to retain the advantages of eventual objective professional evaluation without so much risk of disrupting the team spirit during development."

Computer Services	$ 300.00
Postage	275.00
Supplies	150.00
Total Other Direct Costs	$ 725.00
Overhead expenses of contracting agency (10% - 15%)	
Direct Outward Bound Expenses	
30 scholarships for experimental group subjects	$13,500.00

Psychological feasibility refers to such intangibles as cooperation of the staff and its commitment to evaluation. Few educational program staffs relish intervention and inspection of their work by outsiders. Yet a sophisticated evaluation design necessitates both conditions. Within the Outward Bound staff is a great deal of commitment and belief in the value of the program. Indeed, this characteristic is one of the apparent strengths of the program. However, these belief may also contradict the needs for evaluation felt by some staff members. This contradiction injects a degree of ambivalence and lessens the level of staff cooperation and commitment to evaluation.

The designs described in Section II were proposed with psychological feasibility in mind. They require few transactions between the evaluators and the program. More complex designs were considered and discarded because more interventions would have been required. Even though simplicity is a feature of these designs, the assurance of staff cooperation at the stated critical points needs to be a

matter of contractural agreement rather than good will.

V. Summary Remarks.

Several points remain to be made. First the proposed design is for the Colorado program only. The potential variability among antecedents, transactions, and outcomes for the different schools renders a national study extremely difficult. Similar designs and instruments may be generalized from the Colorado study to other Outward Bound schools. The best strategy would be to conduct the study at the Colorado school and judge its efficacy, before extending the study to cover the other schools.

Second, a potential weakness exists with respect to the selection of variables. The variables were selected because of their importance in the expectations that Outward Bound people have for the program. These expectations refer to the feeling that the Outward Bound experience can effect change in the participants' feelings, personal characterisitics and interpersonal relationships. The evaluators have not posited any theoretical or empirical relationship between the experiences and its effects. Rather, we have adopted the Outward Bound internal perspective that the relationship exists. Outward Bound may not produce these changes but might instead affect the participants' physical strength, love for the outdoors, or environmental consciousness. To the extent that the chosen variables are not realistic expected outcomes, the proposed evaluation may be inadequate. The proposed activities, however, are based largely upon variables derived from study of the philosophy and published position statements of Outward Bound.

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APPENDIX A

PROPOSED OUTWARD BOUND RESEARCH FEASIBILITY STUDY (Proposal presented to Outward Bound March 1, 1973)

The proposed study is designed to ascertain the feasibility of conducting a thorough evaluation of the affective and cognitive outcomes of participation in an Outward Bound program and delineate the design of such evaluation as this study proves to be feasible.

Objectives

The specific objectives of this study by the Bureau of Educational Research and Service are as follows:

1. To determine whether it is possible to evaluate the affective and cognitive participant outcomes of Outward Bound programs.
2. If such an evaluation is possible, to ascertain an appropriate design for this evaluation within given constraints of cost and practicalities such as degree of program description.
3. To present a detailed plan for the evaluation of Outward Bound programs which includes answers to the following questions among others:
   a. What is the basic experimental or quasi-experimental design that is to be employed?
   b. What impact, if any, will conducting the evaluation have upon the operation of the program?
   c. What will it cost?
   d. What instruments are needed?
   e. Which of these instruments currently are available and which must be developed?

f. What evaluative information will be obtained and how definitive can it be expected to be?

g. What type of agency or group of people is needed to conduct the evaluation?

Understandings

The study proposed herein is based on the following understandings concerning Outward Bound and its interest in evaluation of its programs:

1. Several studies of various Outward Bound programs in the United States have been conducted in the past but none has been comprehensive enough or sufficiently focused upon participant outcomes to meet Outward Bound's evaluation needs.
2. Outward Bound wishes to obtain (a) a thorough determination of the extent to which it is possible to ascertain the success of their programs in terms of participant outcomes and (b) a comprehensive plan for conducting such evaluation as is feasible.
3. Outward Bound will make available to the Bureau of Educational Research and Service the results of such studies as have been done in the past to use as a partial basis for ascertaining the merits of these evaluation approaches and the possible value of including such approaches in a comprehensive plan for evaluation.
4. A limited amount of assistance in the persons of Robert Godfrey of Outward Bound and one of the graduate fellows in the Outward Bound Experiential Education Program at the University will be made available to the Bureau of Educational Research and Service

staff at such points as their particular blend of technical expertise and knowledge of Outward Bound would be useful in completing this study.

5. Outward Bound will provide information on the operation of its program and future evaluation resources as needed to design an evaluation which is both practical within the mode of operation of its programs and potentially successful.
6. During the summer of 1973, access will be provided to Colorado Outward Bound activities, personnel and participants to pilot test instruments or other evaluation materials or approaches as should prove to be necessary to complete this study.

Activities

The objectives in which the staff will engage to attain the above objectives are as follows:

1. Outward Bound goals and the desired outcomes of participation in its programs will be ascertained through examination of printed information on Outward Bound, previous evaluation of their programs and interviews with their staff. The purpose of this activity is to (a) ascertain the dependent (outcome) variable as well as to (b) determine what personality or social factors of the participants may relate to successful outcomes.
2. A search will be conducted to determine what instruments related to the previously identified variables (a) are available and useful in current form, (b) are adaptable to a usable form, or (c) must be developed.

3. A preliminary design for a study of outcomes of Outward Bound participation will be prepared given the constraints of the program. Alternative experimental or quasi-experimental designs will be examined and presented in a preliminary report for the reaction of Outward Bound staff prior to proceeding to other aspects of the study. Response to this preliminary report will be used as a basis for selecting the final design and the instruments will be incorporated into the evaluation.
4. Instruments not available for variables identified above as important to the study will be (a) adapated from existing instruments, (b) constructed or, (c) identified as to the detailed specifications to be used in their construction. It is anticipated that all needed instruments will be located, adapted or constructed as part of this feasibility study but it is difficult to anticipate fully all instrumentation that may be needed. As a result, the provision of specifications for one or more instruments as described in (c) above is allowed for as a possible option.
5. Pilot testing of some instruments will be conducted during the summer of 1973. This activity is an extension of the instrument development activity described above. This pilot testing will be done at the site of Outward Bound activities in Marble, Colorado.
6. A final report (20 bound copies will be provided) will be prepared which delineates the following aspects of an evaluation of the outcomes of participation in Outward Bound programs.

a. The degree of specificity and detail about participant outcomes which likely is obtainable from a study of Outward Bound.

b. The outcome variables to be examined.

c. The instruments to be employed in the evaluation, or possibly in some instances, detailed specifications for an instrument which must be developed.

d. The design of the overall evaluation study.

e. The impact on Outward Bound programs of the process of conducting the evaluation.

f. The type of personnel and/or agency required to conduct the study.

g. The time schedule required for the study.

h. An estimate of the cost of conducting the study.

APPENDIX B

CONCEPTUAL ANALYSIS OF VARIABLES TO BE INCLUDED IN AN EVALUATION OF OUTWARD BOUND (Presented to Outward Bound staff on July 1, 1973)

On the following pages is a matrix of variables which have an impact on the effects of Outward Bound programs, or are themselves the desired effects of these programs. Variables have been classified as Antecedents (all those characteristics existing prior to the experience which might have a bearing upon it), Transactions (all the activities and interactions which make up the program), and Outcomes (the effects or results of the program). Along with the variables are questions which can serve as organizers for the evaluation. Disposition refers to the role to be played by the variable in the study or subsidiary studies.

This matrix should be considered tentative. Perhaps it is not feasible to consider every one of the variables mentioned. Perhaps there are omissions. We hope that the staff will feel free to offer ideas on important variables which are here omitted or those variables which should be deleted. It should be noted that this is by no means a final product.

VARIABLE	EVALUATIVE QUESTION	POSSIBLE DISPOSITION
Antecedents		
1. Selection Effects	To what extent are the outcomes of Outward Bound pre-determined by the fact that person A selects himself into the program and person B does not?	Substudy measuring self perceptions in the population of potential participants as defined by the audience at recruitment meetings. Comparison of responses of volunteers and non-volunteers.
2. Expectancy Effects	To what extent do prospective participants' expectations for the program determine the outcomes? (Recruitment, public relations image, recommendations of past participants?)	Study of the initial reactions (collected during transit to course) of subset of participants. This is available data.
3. Sex Effects	Are the outcomes for boys different than the outcomes for girls?	Possible Independent Variables in research design. Possible planned comparisons.
4. Race Effects	Are different results produced for Blacks or Chicanos than for whites?	Same as 3.
5. Personality Effects	Do different personality characteristics determine different outcomes (e.g. "the active energetic kid is more likely to benefit than the passive, withdrawn one")?	Initial ratings by instructors (Available Data), "Pre-test" information on relevant variables, to be used as a design factor, or possible covariate.
6. Effects of Socio-economic Status	Do those who pay their own way have different experiences and outcomes than those who receive scholarships? Are the outcomes for adjudicated delinquents the same as for others?	Investigation of journals as a case study technique. Use of SES variable as a design factor or basis of planned comparisons.

VARIABLE	EVALUATIVE QUESTION	POSSIBLE DISPOSITION
Transactions		
1. The Outward Bound Experience	What is the Outward Bound experience? How can it be communicated accurately to the non-participant?	a) Narrative descriptions by participant observer plus case study of random set of participants by interview and examination of journals. b) Account of the Outward Bound organization and staff plus stated objectives, curriculum, lesson plans.
2. Variability in Curriculum	To what extend do variations in the curriculum influence outcomes?	Narrative account of lesson plan variation from course directors' report (Available Data). Attempt to relate variations in curriculum to variations in outcome of the research study.
3. Variability in course composition, and location	Does the variation among courses contribute to variation in outcome (course determines sex make-up of groups, location, time of year, and to a lesser extent, terrain and weather)?	Attempt to relate variations in "course" to variations in outcome of the research study.
4. Interaction variables	What is the substance and quality of the day to day interactions: student-student and instructor-student? Is it possible to observe a theme and variations of group development within a patrol?	Periodic observation and analysis using checklists and group interaction analysis procedures by trained observer.
5. On-going Participant Reactions	What are the day-to-day reactions of the students to the experience?	Analysis of journal entries from random subset of participants at specified intervals. Supplemental interviews as necessary.

VARIABLE	EVALUATIVE QUESTION	POSSIBLE DISPOSITION
Transactions (Continued)		
6. Motivation Effects	To what extent does the sutdent's level of motivation and effort influence outcomes?	Instructors' pre-assessment. (Available Data)
7.	What is the effect of the group composition of the patrol on individual outcomes?	
8. Instructor Effects	Do different instructors produce different effects in the participants in the patrol of each? Do the following instructor characteristics affect course outcomes? a. Extent to which instructor deals with the feelings of the participants. b. Relative emphasis placed by the instructor on the "mountaineering experience" vs. the "educational experience." c. Relative emphasis placed on the "joyful" vs. "stressful" aspects of the experience. d. Extent to which instructor manipulates (artifically elevates) anxiety of participants. e. Degree to which instructor sees the importance of the group members making their own decisions (directive-non-directive). f. Degree to which instructor pushes patrol. g. Instructor training and experience.	Categorization of instructors by course directors through media of rating scales and/or direct interviewing. Attempt to relate these variables to the outcomes of the research design.

VARIABLE	EVALUATIVE QUESTION	POSSIBLE DISPOSITION
Outcomes		
1. Self Esteem	As the result of the program, does the participant accept himself, both his strengths and weaknesses? Does he place a high value on himself as a worthwhile human being? (Four areas are suggested: somatic, mental, spiritual, social.)	(1-4) Accumulation of evidence from 1. The dependent variables of the research study. a. Self-report measures (selected and constructured by evaluation team) b. The student assessment forms completed by the instructors. (Available Data)
2. Self-Awareness	Can he observe and analyze himself, his feelings, his capabilities and limits. Does he have an accurate and realistic picture of himself?	
3. Self-Assertion	Does he have sufficient confidence in his own abilities to tackle a realistic challenge? Does he act on his environment?	Corroborated by 2. Case study information resulting from journals (randomly selected) and instructor debriefing.
4. Acceptance of Others	Does he show tolerance of others regardless of their weaknesses or strengths? Does he show compassion for others? Can he build strong interpersonal relationships? Does he acknowledge interpersonal responsibility?	
5. Mountaineering Skills	Has he learned (experientially) the necessary skills for mountain living and recreation?	Instructor Evaluation of Students. (Available Data)
6. Environmental Awareness	Is he conscious of the ecological consequences of the mountain experience?	Same as #5
7. Group Interaction Variables	Within the patrol, is there: a. Cohesiveness, cooperativeness, a sense of sharing and joint participation (absence of cliques and ability grouping, incidence of strong helping weak and fast waiting for slow)?	Systematic observation and analysis by trained observer. (The management by objectives workshop was particularly strong in these variables.)

VARIABLE	EVALUATIVE QUESTION	POSSIBLE DISPOSITION
Outcomes (Continued)		
7. (Continued)	b. Mutual trust in the abilities of others in the group, resulting in effective leadership and fellowship?	
	c. An effective system of communication and group problem solving?	
8. Retention	What is the incidence of drop-outs and why do they leave?	Drop-out follow up survey.
9. Accidents	What is the incidence of illness and accidents?	Accident Report. (Available Data)
10. Lasting Effects	Do the immediate effects of Outward Bound generalize across time? Do the outcomes transfer to similar situations in the participant's normal environment?	Six-month follow-up survey to participants and to peers or teachers.
11. Recidivism	What is the rate of recidivism among adjudicated delinquents who have not participated in Outward Bound?	Survey of court records of participating agencies.
12. Achievement and Aspiration Effects	Does the Outward Bound experience lead to differences in academic or vocational achievement or aspiration?	Survey of school records, follow-up questionnaires.

APPENDIX C

Sample* of Contract to be signed by each Participant

I, _____ understand that part of my participation in Outward Bound involves cooperation with the evaluation of the program. Therefore I agree to respond to a questionnaire received some time in the future to the best of my ability and return the questionnaire within 24 hours from the time it reaches me.

_____Signed

_____Date

*The wording is open to change, but the substance should be similar. Outward Bound should include this form with its student materials. It should be viewed much as the photographic release is viewed.

APPENDIX D: Inventory of Outward Bound Effects with test development data

Item	Item/Subtest Correlation	Item Mean	Standard Deviation	Scale	Score Direction
3. What other people think of me does not affect the way I feel about myself.	.24	2.98	1.39	SES	SA=5
6. I don't think I make friends as easily as I should.	.29	3.12	1.12	SES	SA=1
14. I don't question my worth as a person, even if I think others do.	.28	3.41	1.02	SES	SA=5
18. I would change my personality if I could.	.49	3.46	1.18	SES	SA=1
22. I don't worry or condemn myself if other people pass judgment on me.	.38	3.48	.98	SES	SA=5
25. I'm afraid for people that I like to find out what I'm really like, for fear they'd be disappointed in me.	.60	3.58	1.09	SES	SA=1
29. I am just as good looking to the opposite sex as most people I know.	.36	3.38	.81	SES	SA=5
32. I am not as bright as most of the other people I Know.	.13	3.54	1.11	SES	SA=1
36. I would be happier if I could relate to others better.	.32	2.52	1.08	SES	SA=1
40. When someone criticizes me, it makes me feel less worthwhile as a person.	.50	3.23	1.08	SES	SA=1
42. I am nervous about having someone evaluate me.	.37	2.99	1.19	SES	SA=1
44. I am embarrassed by my limitations in intellectual ability.	.32	3.57	1.11	SES	SA=1
46. I often wish that I was more physically attractive to the opposite sex.	.38	2.89	1.01	SES	SA=1
49. I guess I put on a show to impress people I know I'm not the person I pretend to be.	.39	3.53	1.18	SES	SA=1

Item		Item/ Subtest Correlation	Item Mean	Standard Deviation	Scale	Score Direction
51.	I'm very sensitive. When people say things about me I think they are criticizing me or insulting me.	.55	3.10	1.07	SES	SA=1
3.	When people say nice things about me, I find it's hard to believe they really mean it.	.33	3.03	1.02	SES	Always=1
9.	Most of my feelings and motives are a mystery to me.	.20	3.46	1.13	SAW	SA=1
17.	If I had to, I could list most of my weaknesses and strengths.	.15	3.34	.97	SAW	SA=5
24.	When I run into a new challenge, I know my abilities well enough to know whether I can handle it.	.11	3.67	.91	SAW	SA=5
33.	I have spent a lot of time thinking about who I am and what I can do.	.24	3.81	.98	SAW	SA=5
43.	I am able to separate what I know about myself from what other people think of me.	.31	3.48	1.00	SAW	SA=5
6.	I'm sure I know why I do the things I do.	.30	3.71	.78	SAW	Always=1
2.	I feel a person is better off when he takes responsibility for himself.	.14	4.26	.79	SAS	SA=5
7.	I need somebody else to push me through on things.	.42	3.84	1.02	SAS	SA=1
11.	I live largely by other peoples values and standards.	.37	3.69	1.04	SAS	SA=1
15.	I usually sit back and wait for things to happen to me, or for the other person to make the first move.	.39	3.34	1.07	SAS	SA=1
19.	I am really confident when I'm doing something I know how to do.	.30	4.33	.78	SAS	SA=5
21.	My fears of failing stop me from doing many things.	.50	3.59	1.15	SAS	SA=1
26.	I feel confident that I can do something about the problems that arise in the future.	.38	3.95	.77	SAS	SA=5

Item	Item/Subtest Correlation	Item Mean	Standard Deviation	Scale	Score Direction
30. If enough competent people are around, no one will notice when I don't take the lead.	.31	3.04	.99	SAS	SA=1
37. I believe that what happens to me is usually the result of my own actions.	.21	3.98	.84	SAS	SA=5
1. If something needs to be done, I'll step in and get the ball rolling.	.38	3.56	.65	SAS	Always =5
2. When I'm afraid of something, I would rather get around it somehow than to meet it head on.	.46	3.18	.97	SAS	Always =1
4. I would rather assist someone else than to take charge of something myself.	.49	2.91	1.13	SAS	Always =1
5. Even when I've learned a new skill I hesitate to try it out.	.55	3.70	1.02	SAS	Always =1
7. When I meet a difficult obstacle I hold back, hoping that someone else will lead me through it.	.55	3.46	.91	SAS	Always = 1
8. People look to me to get them through a tough situation.	.30	2.80	.69	SAS	Always = 5
10. I let other people decide what to do.	.13	2.97	.91	SAS	Always = 1
4. When I meet someone new I automatically trust him.	.19	2.35	.95	ACO	SA=5
8. I'm easily irritated by people who argue with me.	.34	3.17	1.19	ACO	SA=1
16. I find it's difficult to be friendly with people who have different backgrounds from mine.	.45	4.03	.95	ACO	SA=1
20. I can't work well with someone I don't like.	.31	2.60	1.16	ACO	SA=1
31. Even when I recognize that a person has faults, I can get along with him anyway.	.37	4.09	.82	ACO	SA=5
34. I have a hard time listening to people with different ideas than mine.	.44	3.67	1.02	ACO	SA=1
35. Sometimes I can't help but feel that most other people are below me.	.39	3.64	1.01	ACO	SA=1

Item	Item/ Subtest Correlation	Item Mean	Standard Deviation	Scale	Score Direction
39. I get impatient when one person slows down the group I'm in.	.41	3.02	1.20	ACO	SA=1
80. I sometimes think "I would like that person better if his ideas were more like mine."	.30	3.41	1.07	ACO	SA=1

KEY:

Scales: SES = Self-Esteem; SAW = Self-Awareness; SAS = Self-Assertion; ACO = Acceptance of Others.

Score Direction: "SA=1" means that the item value for that item is one if the individual marked Strongly Agree, two if the individual marked Agree, Neutral = 3, Disagree = 4, Strongly Disagree = 5.
"SA=5" means an item value is 5 if the individual marked Strongly Agree, Agree = 4, Neutral = 3, Disagree = 2, Strongly Disagree=1.
"Always=1" means that the item value for that item is one if the individual marked Always, Usually = 2, Sometimes = 3, Seldom = 4, Never = 5.
"Always=5" means that the item value is 5 if the individual marked Always, Usually = 4, Sometimes = 3, Seldom = 2, and Never = 1.

The subscale score is the sum of the item values of all the items which fall into a scale.

Remaining items: Eighteen items did not meet the criteria for item selection. Although it is necessary that these items remain on the instrument, they are not to be scored.

Inventory of Outward Bound Effects

PART ONE:

Please respond to each statement in the following way:

SA Draw a circle around SA if you strongly agree with the statement, if it is a very true picture of yourself.

A Draw a circle around A if you agree with the statement, if it is mostly true of yourself.

N Draw a circle around N if you have no opinion about the statement or if it is neither true nor untrue of yourself.

D Draw a circle around D if you disagree with the statement or if it is usually untrue of yourself.

SD Draw a circle around SD if you strongly disagree with the statement or if it is a very untrue picture of yourself.

Remember that the correct answer is the one that best applies to you.

1. I know what I can do and what I can't do. ..... SA A N D SD
2. I feel a person is better off when he takes responsibility for himself. ..... SA A N D SD
3. What other people think of me does not affect the way I feel about myself. ..... SA A N D SD
4. When I meet someone new I automatically trust him. ..... SA A N D SD
5. I can recognize when some task is beyond my abilities. ..... SA A N D SD
6. I don't think I make friends as easily as I should. ..... SA A N D SD
7. I need somebody else to push me through on things. ..... SA A N D SD
8. I'm easily irritated by people who argue with me. ..... SA A N D SD
9. Most of my feelings and motives are a mystery to me. ..... SA A N D SD
10. I feel that I'm on the same level as other people and that helps establish good relations with them. ..... SA A N D SD
11. I live largely by other peoples values and standards. ..... SA A N D SD
12. What other people think of my ideas affects the way I feel toward them. ..... SA A N D SD

13. I now have a pretty clear idea about where I'm going and what I want out of life. ..... SA A N D SD

14. I don't question my worth as a person, even if I think others do. ..... SA A N D SD

15. I usually sit back and wait for things to happen to me, or for the other person to make the first move. ..... SA A N D SD

16. I find it's difficult to be friendly with people who have different backgrounds from mine. ..... SA A N D SD

17. If I had to, I could list most of my weaknesses and strengths. ..... SA A N D SD

18. I would change my personality if I could. ..... SA A N D SD

19. I am really confident when I'm doing something I know how to do. ..... SA A N D SD

20. I can't work well with someone I don't like. .. SA A N D SD

21. My fears of failing stop me from doing many things. ..... SA A N D SD

22. I don't worry or condemn myself if other people pass judgment on me. ..... SA A N D SD

23. My feelings toward another person do not depend on his feelings toward me. ..... SA A N D SD

24. When I run into a new challenge, I know my abilities well enough to know whether I can handle it. ..... SA A N D SD

25. I'm afraid for people that I like to find out what I'm really like, for fear they'd be disappointed in me. ..... SA A N D SD

26. I feel confident that I can do something about the problems that arise in the future. ..... SA A N D SD

27. I trust the ability of most people to make their own decisions. ..... SA A N D SD

28. It's a struggle to get along with most people. ..... SA A N D SD

29. I am just as good looking to the opposite sex as most people I know. ..... SA A N D SD

30. If enough competent people are around, no one will notice when I don't take the lead. ... SA A N D SD

31. Even when I recognize that a person has faults, I can get along with him anyway. ..... SA A N D SD

32. I am not as bright as most of the other people I know. ..... SA A N D SD

33. I have spent a lot of time thinking about who I am and what I can do. ..... SA A N D SD

34. I have a hard time listening to people with different ideas than mine. ..... SA A N D SD

35. Sometimes I can't help but feel that most other people are below me. ..... SA A N D SD

36. I would be happier if I could relate to others better. ..... SA A N D SD

37. I believe that what happens to me is usually the result of my own actions. ..... SA A N D SD

38. When I meet someone new I just assume that they will like me. ..... SA A N D SD

39. I get impatient when one person slows down the group I'm in. ..... SA A N D SD

40. When someone criticizes me, it makes me feel less worthwhile as a person. ..... SA A N D SD

41. I get a better feeling from teaching someone how to do something I'm good at, than doing it for myself. ..... SA A N D SD

42. I am nervous about having someone evaluate me. ..... SA A N D SD

43. I am able to separate what I know about myself from what other people think of me. .... SA A N D SD

44. I am embarrassed by my limitations in intellectual ability. ..... SA A N D SD

45. I look down on someone who talks about his fears or troubles. ..... SA A N D SD

46. I often wish that I was more physically attractive to the opposite sex. ..... SA A N D SD

47. My feelings about another person seem to depend on how much he accomplishes. ..... SA A N D SD

48. I get a good feeling from helping a less competent person succeed at something I'm good at. ..... SA A N D SD

49. I guess I put on a show to impress people. I know I'm not the person I pretend to be. .... SA A N D SD

50. I sometimes think "I would like that person better if his ideas were more like mine." .. SA A N D SD

51.	I'm very sensitive. When people say things about me I think they are criticizing me or insulting me.	SA	A	N	D	SD
52.	I often feel upset but don't know why.	SA	A	N	D	SD
53.	I can't see what it is that my friends like about me.	SA	A	N	D	SD
54.	I do stupid things that I know at the time are stupid, but I do them anyway without thinking about it.	SA	A	N	D	SD
55.	Often I'll do something that seems like fun and then look back later and wonder why I thought it was fun.	SA	A	N	D	SD

PART TWO:

Please respond to the remaining statements in the following way:

1 = Draw a circle around "1" if the statement is ALWAYS TRUE FOR YOU.

2 = Draw a circle around "2" if the statement is USUALLY TRUE FOR YOU.

3 = Draw a circle around "3" if the statement is SOMETIMES TRUE FOR YOU.

4 = Draw a circle around "4" if the statement is SELDOM OR RARELY TRUE FOR YOU.

5 = Draw a circle around "5" if the statement is NEVER TRUE FOR YOU.

		Always	Usually	Sometimes	Rarely	Never
1.	If something needs to be done, I'll step in and get the ball rolling.	1	2	3	4	5
2.	When I'm afraid of something, I would rather get around it somehow than to meet it head on..	1	2	3	4	5
3.	When people say nice things about me, I find it's hard to believe they really mean it.	1	2	3	4	5
4.	I would rather assist someone else than to take charge of something myself.	1	2	3	4	5
5.	Even when I've learned a new skill I hesitate to try it out. .	1	2	3	4	5

	Always	Usually	Sometimes	Rarely	Never
6. I'm sure I know why I do the things I do.	1	2	3	4	5
7. When I meet a difficult obstacle I hold back, hoping that someone else will lead me through it.	1	2	3	4	5
8. People look to me to get them through a tough situation.	1	2	3	4	5
9. I would rather help a person through a tough spot than let him struggle through by himself.	1	2	3	4	5
10. I let other people decide what to do.	1	2	3	4	5

Did you have any trouble reading or understanding any of the questions on these pages?

_____Yes

_____No

If you answered yes, please place a check mark next to the question which was unclear to you.

APPENDIX E

OUTWARD BOUND PROCESS INVENTORY

Name of Observer-Rater _____

Name of Instructor _____

Observation Period One ____ Two ____ Three ____ Four ____

Respond to the first set of items with the following scale

A = The statement is true for NONE OF THE PATROL

B = The statement is true for 1 or 2 patrol members

C = The statement is true for 3 or 4 members

D = The statement is true for 5 or 6 members

E = The statement is true for 7 or more members

1.	Members are willing to discuss differences openly with each other	A B C D E
2.	Members help each other in difficult situations	A B C D E
3.	Members express concern about each other during the day's activities	A B C D E
4.	Members go out of their way to gain approval of the instructor	A B C D E
5.	Members appear not to be very highly motivated during the days activities	A B C D E
6.	Members of the patrol cooperate equally well with each other	A B C D E
7.	Members of the patrol compete to see who can perform the best	A B C D E
8.	Members of the patrol do favors for one another	A B C D E
9.	Patrol members interact only with a few others	A B C D E

10. Members have little or no respect for certain others in the patrol — A B C D E
11. Patrol members impose their wishes on the group — A B C D E
12. Members of the patrol willingly rely on the abilities of others — A B C D E
13. Members express their feelings openly — A B C D E
14. Members stay pretty much to themselves during free time — A B C D E
15. Members are <u>too</u> dependent on each other — A B C D E
16. Members of the patrol don't trust themselves to the safekeeping of others — A B C D E
17. Members will not follow when one particular individual is taking the lead — A B C D E
18. Members blame one another or the circumstances for their failure — A B C D E

Respond to the next set of items with the following scale:

A = Strongly agree

B = Agree

C = Neutral

D = Disagree

E = Strongly Disagree

19. Certain members tend to pick on other members of the patrol — A B C D E
20. During the day's activities, the patrol experiences a split between the fast movers and the slow movers — A B C D E
21. There is a great deal of trust among the patrol members — A B C D E

22.	Each member of the patrol has as much influence as any other member	A B C D E
23.	Most patrol members cooperate rather than compete with one another	A B C D E
24.	Patrol decisions tend to be made by all the patrol members	A B C D E
25.	There are tensions among certain patrol members that tend to interfere with the group's activities	A B C D E
26.	Certain patrol members are favored by the leader more than others	A B C D E
27.	The patrol shares duties and responsibilities about evenly	A B C D E
28.	Members of the patrol have formed cliques	A B C D E
29.	Leadership is shared in the patrol	A B C D E
30.	Members of the patrol are obviously having fun	A B C D E
31.	There is a great deal of confusion	A B C D E
32.	The instructor is making the course as (physically) rigorous as he can	A B C D E
33.	The instructor takes every opportunity to discuss the feelings of patrol members	A B C D E
34.	The instructor tends to let the patrol members make their own decisions	A B C D E

Comments: _____

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